



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE PECEIVED

NOV 3 0 2004

Technology Center 2600

Our File:

I-2-0108.3US

Date:

November 22, 2004

In the **PATENT APPLICATION** of:

David K. Mesecher

Application No.: 10/068,718

Confirmation No.: 2637

Filed:

February 6, 2002

For: BASE STATION FOR USE IN A CDMA COMMUNICATION SYSTEM USING AN

ANTENNA ARRAY

Group:

2637

Examiner:

Temesghen Ghebretinsae

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Further to Applicant's Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicant wishes to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Newly cited documents are indicated by an asterisk (*). Copies of the newly cited non-U.S. patent documents are enclosed.

Pursuant to amended 37 C.F.R. §1.98(a)(2)(i), copies of the cited U.S. patent documents have not been included. Copies of all other newly cited references are enclosed.

Pursuant to 37 C.F.R. § 1.97(e)(1), the undersigned certifies that each newly cited item of information indicated by a double asterisk (**) contained in this Supplemental Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, copy enclosed, and that this communication was not received by any individual designated in §1.56(c) more than three (3) months prior to the filing of the information disclosure statement.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

Respectfully submitted,

David K. Mesecher

Jeffrey M. Glabicki

Registration No. 42,584

(215) 568-6400

Volpe and Koenig, P.C. United Plaza, Suite 1600 30 South 17th Street Philadelphia, PA 19103

JMG/ks Enclosures (27) O RE JOJO TO THE PERSON OF THE

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO. I-2-0108.3US

SERIAL NO. 10/068,718

APPLICANT
David K. Mesecher

FILING DATE February 6, 2002 GROUP NO V 28370 2004

Technology Center 2000

	U.S. PATENT DOCUMENTS		Technology denter 20				
EXAMINER INITIAL		DOCUMENT NUMBER	DOCUMENT NUMBER DATE NAME		CLASS	SUBCLASS	FILING DATE II
71		3,662,268	05/1972	Gans et al.			
		4,736,460	04/1988	Rilling			
		4,901,307	02/1990	Gilhousen et al.			
$\dashv \dashv$	•	5,146,475	09/1992	Kubo			
\top	•	5,319,677	06/1994	Kim			
\top	•	5,331,666	07/1994	Dent			
1	•	5,381,443	01/1995	Borth et al.	••		
\top	•	5,457,704	10/1995	Hoeher et al.			
	•	5,493,563	02/1996	Rozanski et al.			
	•	5,623,511	04/1997	Bar-David et al.			
		5,652,764	07/1997	Kanzaki et al.			
	•	5,673,294	09/1997	Namekata			
	•	5,680,419	10/1997	Bottomley			
		5,694,388	12/1997	Sawahashi et al.			
		5,809,020	09/1998	Bruckert et al.			
		5,812,542	09/1998	Bruckert et al.			·
	•	5,822,380	10/1998	Bottomley			
		5,822,701	10/1998	Tomisato et al.			
		5,886,987	03/1999	Yoshida et al.			
	•	5,903,834	05/1999	Wallstedt et al.			
		5,952,968	09/1999	McDowell			
		5,982,327	11/1999	Vook et al.			
\top		5,991,332	11/1999	Lomp et al.			
		6,009,074	12.19/99	Kim et al.			
	•	6,026,130	02/2000	Rahmatullah et al.			
11		6,044,120	03/2000	Bar-David et al.			
		EXAMINER		DATE	CONSIDERE	D	

MY 2 6 200 E

RECEIVED

NOV 3 0 2004

Technology Center 2600

Sheet 2 of 5

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

FORM PTO-1449

ATTY. DOCKET NO. I-2-0108.3US

SERIAL NO. 10/068,718

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

APPLICANT David K. Mesecher

FILING DATE February 6, 2002 GROUP 2637

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	Date	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
V5		6,067,324	05/2000	Harrison			L
Ī	٠	6,081,566	06/2000	Molnar et al.			
	•	6,108,517	08/2000	Arslan et al.			
		6,147,985	11/2000	Bar-David et al.			
	•	6,148,041	11/2000	Dent			
		6,154,443	11/2000	Huang et al.			
	•	6,160,801	12/2000	Uchida et al.			
	•	6,161,209	12/2000	Moher			
	•	6,215,762	04/2001	Dent			
	•	6,335,954	01/2002	Bottomley et al.			
		6,459,740	10/2002	Lo			
	•	6,470,047	10/2002	Kleinerman et al.			
	•	6,470,192	10/2002	Karlsson et al.			
	•	6,483,866	11/2002	Suzuki			
	•	6,484,285	11/2002	Dent			
	•	6,501,788	12/2002	Wang et al.			
	·	6,501,803	12/2002	Alamouti et al.			
	•	6,556,634	04/2003	Dent			
	*	6,647,070	11/2003	Shalvi et al.			
	•	6,694,154	02/2004	Molnar et al.			
	•	6,697,441	02/2004	Bottomley et al.			
T		6,731,700	05/2004	Yakhnich et al.			

EXAMINED	DATE CONSIDERED
$\mathcal{S}\mathcal{A}$	3/8/05

RECEIVED

NOV 3 0 2004

Technology Center 2600

Sheet 3 of 5

FORM PTO-1449		ATTY. DOCKET NO. I-2-0108.3US	SERIAL NO. 10/068,718						
	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			APPLICANT David K. Mesecher					
		ST	FORMATION DISCLOSURE FATEMENT BY APPLICANT		FILING DATE February 6, 2002		GROUP 2637		
		(Us	e several sheets if necessary)			<u> </u>			
				U.S. PATENT	DOCUMENTS				
EXAM INIT			DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS		DATE IF OPRIATE
70	2	•	2001/0030993	10/2001	Bottomely et al.				
1	,	•	2002/003846	01/2002	Khayrallah et al.				
		•	2002/0122510	05/2002	Yakhnich et al.				
Г	П	•	2002/0181430	12/2002	Thomas et al.				
	П	•	2002/150187	10/2002	Chugg et al.				
	П	•	2002/154704	10/2002	Reshef				
	П	•	2003/0013468	01/2003	Khatri				
		•	2003/0053524	03/2003	Dent				
		•	2003/0058929	03/2003	Cox et al.				
		*	2003/0092456	05/2003	Dent				
			F	OREIGN PATE	ENT DOCUMENTS				
					-			TRAN	SLATION
_			DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
6	j	*	0 674 455	10/1994	EP	ļ	ļ		
2			0 715 421	06/1996	EP.	-			
-			07 55 127 A2	01/1997	EP.	 			
X			0 820 157 A 08 81 781 A2	01/1998	EP.				
1	_	•	08 81 781 A2 0 892 508	01/1999	P EP	 			
2			08 99 894 A2	03/1999	EP	 			
١			22 80 575 A	02/1995	GB				

EXAMINER/	DATE CONSIDERED
	3/8/18

A SE ALL

RECEIVED

NOV 3 0 2004

Sheet 4 of 5

ATTY. DOCKET NO. FORM PTO-1449 I-2-0108.3US 10/068,718 U.S. DEPARTMENT OF COMMERCE **APPLICANT** PATENT AND TRADEMARK OFFICE David K. Mesecher INFORMATION DISCLOSURE **FILING DATE GROUP** STATEMENT BY APPLICANT 2637 February 6, 2002 (Use several sheets if necessary) FOREIGN PATENT DOCUMENTS TRANSLATION COUNTRY CLASS SUBCLASS NO DOCUMENT NUMBER DATE YES WO 01/1994 94/01956 12/1995 WO 95/34140 WO 96/11533 04/1996 WO 97/13386 04/1997 WO 01/1999 99/04537 WO 99/12283 03/1999 WO 99/52311 10/1999 WO 00/35159 06/2000 07/2000 WO 00/44141 WO 00/48330 08/2000 11/2000 WO . 00/69192 WO 01/05088 01/2001 04/2001 WO 01/28174 06/2001 WO 01/45289 WO -02/09297 01/2002 03/2002 WO 02/23787 * 02/065719 08/2002 WO 08/2002 WO 02/067444 WO 02/084892 10/2002 03/003604 01/2003 WO WO 03/010899 02/2003 04/012341 WO 02/2004

	EXAMI	VER	DATE CONSIDERED
--	-------	-----	-----------------

OLE SOLE STATES

NOV 3 0 2004

Technology Center 2600

Sheet 5 of 5

FORM PTO-1449			ATTY. DOCKET NO. I-2-0108.3US	SERIAL NO. 10/068,718		
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			APPLICANT David K. Mesecher			
		FORMATION DISCLOSURE FATEMENT BY APPLICANT	FILING DATE February 6, 2002	GROUP 2637		
	(Us	e several sheets if necessary)				
\- <u>-</u>		OTHER DOCUMENTS (Including A	uthor, Title, Date, Pertinent Pages	s, Etc.)		
Z		Pahlavan et al., "Performance of Adaptive l Transactions on Communication	Matched Filter Receivers Over Fains, Vol. 38, No. 12, December 19	ading Multipath Channels," IEEE 990, pp. 2106-2113.		
ab	1	Latva-aho et al., "LMMSE Detection for D Communications,	al., "LMMSE Detection for DS-CDMA Systems in Fading Channels," IEEE Transactions on Communications, Vol. 48, No. 2, February 2000, 194-199.			
W	\	Majmundar et al., "Adaptive Single-User Receivers for Direct-Sequence Spread-Spectrum CDMA Systems," IEEE Transactions on Vehicular Technology, Vol. 49, No. 2, March 2000, pp. 379-389.				
		Foerster et al., "Coding for a Coherent DS-CDMA System Employing an MMSE Receiver in a Rayleigh Fading Channel," IEEE Transactions on Communications, Vol. 48, No. 6, June 2000, pp. 1012-1021.				
		·				

EXAMINER 3 DATE CONSIDERED